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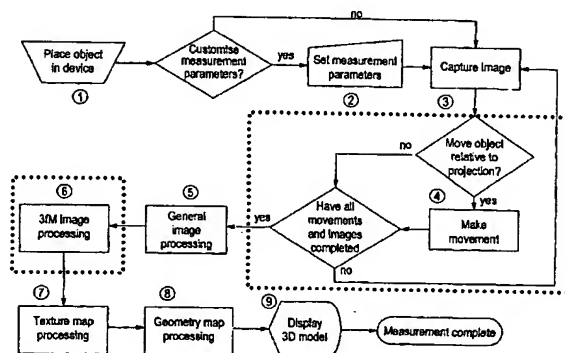
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(54) Title: METHODS AND APPARATUS FOR MAKING IMAGES INCLUDING DEPTH INFORMATION



(57) Abstract: A method for making an image of an object including depth information comprising the steps of: illuminating the object with a periodic pattern of light from an illuminating arrangement; the illuminating arrangement being such that the pattern is in focus in a focal plane and defocuses progressively away from said focal plane; the object being placed such that different parts of it are at different distances from the focal plane; capturing image data from the thus-illuminated object; analysing the captured image data to extract depth information based on the extent of defocussing of the pattern; and displaying an image of the object without the pattern and with depth information. Apparatus or carrying out the method, comprising an illuminating arrangement adapted to illuminate the object with a periodic pattern of light; the illuminating arrangement being such that the pattern is in focus in a focal plane and defocuses progressively away from said focal plane; the object being locatable with respect to the illuminating arrangement such that different parts of it are at different distances from the focal plane; image data capturing means adapted to capture image data from the thus illuminated object; data analysis means adapted to analyse captured image data to extract depth information based on the extent of defocussing of the pattern; and image display means for displaying an image of the object without the pattern and with depth information.



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 376 818 B1 (WILSON TONY ET AL) 23 April 2002 (2002-04-23)	1,2,4,6, 8-10, 12-15, 18-21, 23,24, 28-57
Y	column 1, line 44 - line 47  column 1, last paragraph column 4, line 50 - line 54 column 5, line 34 - line 65 figures 1,2  ----- -/-	11,16, 17,22

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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